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F3*

4. An isolated nucleic acid according to claim 2 comprising the nucleic acid sequence selected.

5. An isolated nucleic acid which will hybridize under high stringency conditions to the nucleic acid complement of a sequence selected from the group consisting of SEQ ID NOS: 2, 4.

6. An isolated nucleic acid according to claim 1 operably linked to control sequences recognized by a host cell transformed with the nucleic acid.

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7. An expression vector comprising the nucleic acid of claim 6.

8. A host cell comprising the nucleic acid of claim 1.

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9. A host cell comprising the vector of claim 7.

10. A process for producing an Edg protein comprising culturing the host cell of claim 8 or 9 under conditions suitable for expression of an Edg protein.

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11. A process according to claim 10 further comprising recovering said Edg protein.

12. An isolated Edg protein that is at least about 85% identical to the amino acid sequence selected from the group consisting of SEQ ID NOS: 1, 3.

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13. An Edg protein according to claim 12 comprising the sequence selected from the group consisting of SEQ ID NOS: 1, 3.

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14. An Edg protein according to claim 12 encoded by a nucleic acid at least about 85% identical to the nucleic acid sequence selected from the group consisting of SEQ ID NOS: 2, 4.

15. A protein encoded by a nucleic acid that will hybridize under high stringency conditions to the complement of the nucleic acid sequence selected from the group consisting of SEQ ID NOS: 2 and 4.

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16. An isolated polypeptide which specifically binds to an Edg protein according to claim 12.

17. A monoclonal antibody that reduces or eliminates the biological function
10 of an Edg protein encoded by a nucleic acid that will hybridize under high stringency conditions to the nucleic acid or its complement selected from the group consisting of SEQ ID NOS: 2 and 4.

18. A method for screening for a bioactive agent capable of binding to an
15 Edg protein, said method comprising combining an Edg protein and a candidate bioactive agent, and determining the binding of said candidate agent to said Edg protein, wherein said Edg protein is selected from the group consisting of SEQ ID NOS: 1 and 3.

20 19. A method for screening for a bioactive agent capable of modulating the activity of an Edg protein, said method comprising the steps of adding a candidate bioactive agent to a cell comprising an isolated nucleic acid encoding an Edg protein, and determining the effect of the candidate bioactive agent on a biological activity of said Edg protein, wherein said Edg protein is selected from the group consisting of
25 SEQ ID NOS: 1 and 3.

20. The method of claim 19, wherein said biological activity is the binding of said Edg protein with its correlative ligand.

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